

5           A CATALYST COMPOSITION, A PROCESS FOR PREPARING  
          THE CATALYST COMPOSITION AND A USE  
          OF THE CATALYST COMPOSITION

ABSTRACT

10           A catalyst composition comprising a support having a  
          surface area of at least 500 m<sup>2</sup>/kg, and deposited on the  
          support:  
          silver metal,  
          a metal or component comprising rhenium, tungsten,  
15   molybdenum or a nitrate- or nitrite-forming compound, and  
          a Group IA metal or component comprising a Group IA  
          metal having an atomic number of at least 37, and in  
          addition potassium,  
          wherein the value of the expression  $(Q_K / R) + Q_{HIA}$  is in  
20   the range of from 1.5 to 30 mmole/kg, wherein  $Q_{HIA}$  and  $Q_K$   
          represent the quantities in mmole/kg of the Group IA  
          metal having an atomic number of at least 37 and  
          potassium, respectively, present in the catalyst  
          composition, the ratio of  $Q_{HIA}$  to  $Q_K$  is at least 1:1, the  
25   value of  $Q_K$  is at least 0.01 mmole/kg, and R is a  
          dimensionless number in the range of from 1.5 to 5, the  
          units mmole/kg being relative to the weight of the  
          catalyst composition.